

Metadata Input Form (* Mandatory fields)

Data Identification Information (Basic information about the data set)

Please use this template and save in your files as a backup of your metadata. Simply copy/paste information onto website.

Click on grey rectangles to type text

Title of data: *(e.g. Climate data in Northern Québec)
Microwave Radiometer data in Iqaluit, NU - STAR project

How should the data be cited: *(As unpublished data or a journal reference)

(Maximum characters: 500, including spaces)

Study Site: *
Environment Canada Weather Office in Iqaluit, NU

Purpose: * (A summary of the intentions with which the data set was developed)
- column-integrated water vapor and liquid water content
- validation/parameterization GEM, GEM-LAM
- comparisons between upper air radiosondes, and aircraft measurements for validation purposes.

(Maximum characters: 1500, including spaces)

Abstract: * (description of methodology and data type, e.g., interviews, physical and chemical variables, imagery, recordings, maps and other spatial data, profile, etc.)

The WVR-1100 is a dual frequency radiometer operating at 23.8 GHz and 31.4 GHz. This allows simultaneous measures of integrated water vapor and integrated liquid water measures in the scan path. The STAR radiometer had a sampling resolution of about 1-minute, with vertical profiles ranging up to 10 km in the atmosphere. The data was automatically stored in two types of files *.los, *.sav, *.err and ND_calib.log. The *.los data file contains line of sight information, including date and time, brightness temperatures, total integrated water vapour and liquid water, phase delay, opacities, and azimuth and elevation observations. The *.sav data file contains all data collected by the instrument, including raw data files so that the user can post-process with different retrieval coefficients. The *.err file contains the radiometer fault messages, if any occurred during the data collection period. The ND_calib.log is a log of the calibration results

The radiometer was only operational during the fall field campaign (Oct 10 - Nov 30, 2007). During specific time periods, the radiometer stopped working and/or there were problems with the data files. There is some missing data as a result. No data is available between day 296 (Oct 23) and day 300 (Oct 27), intermittent data is available between 300 (Oct 27), no data is available between day 316 (Nov 12) 14:30 and day 317 (Nov 13) because of a power outage

(Maximum characters: 1500, including spaces)

Data Originators: *(e.g. name of data collector(s))

(Do not enter duplicate originators)

John Hanesiak, University of Manitoba CEOS, Winnipeg, MB

Ron Stewart, University of Manitoba CEOS, Winnipeg, MB

Kent Morre, University of Toronto, Toronto, ON

Peter Taylor, York University, Toronto, ON

Mengistu Wolde, Flight Research Laboratory, National Research Council of Canada, Ottawa, ON

Walter Strapp, Cloud Physics and Severe Weather Division, Environment Canada, Ottawa, ON

Links to data (if available, **enter NI Email address if direct link is not yet available**):

Status of data: * **Click on grey rectangle to view scroll down menu**
Completed

Maintenance and update frequency: * **Click on grey rectangle to view scroll down menu**
Daily

Geographic Coordinates (in decimal format)

Research Area *

Coordinates should be in the range of -90.0000 to 90.0000 for the latitude and -180.0000 to 180.0000 for the longitude

North (latitude N): 63 deg 44.85 min

South (latitude N):

West (longitude W): - 68 deg 32.668 min

East (longitude W):

Time Period (covered by the data set)

* **Select entry from scroll down menu on website**

Start Year: * 2007

End Year: * 2007

Start Month: * September

End Month: * November

Start Day: * 23

End Day: * 30

Keywords (see Keywords Library)

(e.g., Air, temperature, Precipitation, Photosynthesis, Ocean, Soil, Bacterial production, Climate, Land, Policy, Charr)

* Select entry from the scroll down menu on the website or consult the Keywords Library

Keyword 1: *Atmospheric water vapor content

Keyword 2: *

Keyword 3: *

Keyword 4: *

Keyword 5: *

Keyword 6:

Keyword 7:

Keyword 8:

Keyword 9:

Keyword 10:

Security

Access: * Click on grey rectangle to view scroll down menu
Public